September 19, 1956

Dear Dr. Kellenberger:

I must apologize to you for having taken so long to reply to your letter of July 14-- we were however away from Madison on several trips. I also have your postcard requesting reprints— these were already mailed some time ago, and you should receive them soon. We are very happy to exchange publications with you.

We have been quite interested in the "immune" types which occur in transductions —x Gal^- Lp^s, and have them under further study. They occur quite characteristicalky as a proportion of the transductions with HFT phage, regardless of the particular recipient. As these "immunes" have always been still hetero- or homo-genotic for the Gal factor, and invariably segregate Lp^s when the Gal factors segregate, we suspect that this "immune" is actually a homogenote for Lp^s: that is to say, that the constitution $Lp^s//Lp^s$ shows, for some reason, the immune phenotype. However, further work is needed to substantiate this hypothesis, and, for example, to determine whether the Lp locus is in fact duplicated in heterogenotes, analogously to the Gal loci. My wife Esther is studying this question now with marked lambda stocks.

If you are still interested in pursuing this question, you can then reproduce these findings with any Lp^s Gal^- stock. I assume you already have such, but if not please let me know your requirements.

Yours sincerely,

Joshua Lederberg
Professor of Genetics

P.S. Needless to say, we would be interested to hear of your findings. We did not obtain evidence of even inefficient induction or lysis by UV treatment of <u>these</u> segregating immunes, in distinction to some of the other Lp^r (defective prophage) strains reported in other connections.